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Substitute for form 1449A/PTO		Complete if Known	
		Application Number	09/991,152
		Filing Date	November 16, 2001
		First Named Inventor	Stephanie Aquin
		Group Art Unit	1045 1638
		Examiner Name	M. Elwain
Sheet 1 of 6	Attorney Docket Number	MBX 041	

U.S. PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	US Patent Document		Name of Patentee or Applicant of Cited Document	Date of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
EM		5,034,322		Rogers	07-23-1991	
		5,245,023		Peoples et al.	09-14-1993	
		5,250,430		Peoples et al.	10-05-1993	
		5,268,463		Jefferson	12-07-1993	
		5,276,268		Strauch, et al.	01-14-1994	
		5,364,780		Hershey et al.	11-15-1994	
		5,420,034		Kridl, et al.	05-30-1995	
		5,464,765		Coffee, et al.	11-07-1995	
		5,530,196		Fraley, et al.	06-25-1996	
		5,591,616		Hiei et al.	01-07-1997	
		5,608,152		Kridl, et al.	03-04-1997	
		5,650,554		Moloney	07-22-1997	
		5,668,298		Waldron, et al.	09-16-1997	
		5,750,848		Kruger et al.	05-12-1998	
		5,767,378		Bojsen et al.	06-16-1998	
		5,777,200		Ryals et al.	07-07-1998	
		5,846,767		Halpin et al.	12-08-1998	
		6,011,144		Steinbuechel et al.	01-04-2000	
		6,143,952		Srienc et al.	11-07-2000	

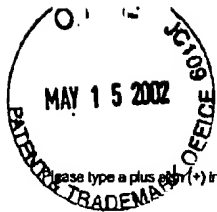
FOREIGN PATENT DOCUMENTS								
Examiner Initials*	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ³
		Office. ²	Number ²	Kind Code ² (if known)				
EW		EP	0 530 129	A1	Danisco A/S	03-03-1993		
		WO	93/20216		University Technologies International, Inc	10-14-1993		
		WO	91/00917	A1	Mass. Inst. of Tech.	01-24-1991		
		WO	98/06854	A1	Monsanto Company	02-19-1998		
		WO	98/54342	A1	Joseph Atabekov, et al.	12-03-1998		

Examinee Signature	<i>E. M. Elwain</i>	Date Considered	1/3/05
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		Application Number	09/991,152
		Filing Date	November 16, 2001
		First Named Inventor	Stephanie Aquin
		Group Art Unit	1645
Examiner Name			
Sheet	2	of	6
		Attorney Docket Number	MBX 041

OTHER ART - NON PATENT LITERATURE DOCUMENTS			
Examiner's Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
EM		BEVAN, et al., "Structure and transcription of the nopaline synthase gene region of T-DNA," <i>Nucleic Acids Res.</i> 11:369-85 (1983).	
		BLACK, et al., "Cloning, sequencing, and expression of the <i>fadD</i> gene of <i>E. coli</i> encoding acyl coenzyme A synthetase," <i>J. Biol. Chem.</i> 267:25513-25520 (1992).	
		CLOUGH & BENT, "Floral di: a simplified method for Agrobacterium-mediated transformation of <i>Arabidopsis thaliana</i> ," <i>Plant Journal</i> 16:735-743 (1998)	
		CUBITT, et al., "Understanding, improving and using green fluorescent proteins," <i>Trends Biochem. Sci.</i> 20(11):448-55 (1995).	
		DASGUPTA, et al., "Co-ordinated expression of multiple enzymes in different subcellular compartments in plants," <i>The Plant Journal</i> 16:107-16 (1998).	
		FIEDLER, et al., "PhaG-mediated synthesis of poly(3-hydroxyalkanoates) consisting of medium-chain-length constituents from nonrelated carbon sources recombinant <i>Pseudomonas fragi</i> ," <i>Applied and Environmental Microbiology</i> 66:2117-2124 (2000).	
		FROMM, et al., "Inheritance and expression of chimeric genes in the progeny of transgenic maize plants," <i>Biotechnology (N.Y.)</i> 8(9):833-39 (1990).	
		GASSER & FRALEY, "Genetically Engineering Plants for Crop Improvement," <i>Science</i> 244:1293-1299 (1989).	
		HOFFMANN, "The pseudomonas aeruginosa phaG gene product is involved in the synthesis of polyhydroxyalkanoic acid consisting of medium-chain-length constituents from non-related carbon sources," <i>FEMS Microbiology Letters</i> 184:253-259 (2000).	
		HOOD et al., "The hypervirulence of <i>Agrobacterium tumefaciens</i> A281 is encoded in a region of pTiBo542 outside of T-DNA," <i>J. Bacteriol.</i> 168:1291-301 (1986).	

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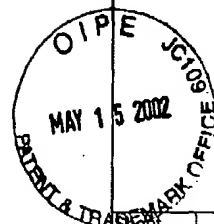
Substitute for form 1449/APTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Complete if Known

Application Number	09/991,152
Filing Date	November 16, 2001
First Named Inventor	Stephanie Aquin
Group Art Unit	1645
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Attorney Docket Number	MBX 041



Sheet 3 of 6

OTHER ART - NON PATENT LITERATURE DOCUMENTS

Examiner's Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
SM		HUISMAN, et al., "Metabolism of poly(3-hydroxyalkanoates) (PHAs) by <i>Pseudomonas oleovorans</i> . Identification and sequences of genes and function of the encoded proteins in the synthesis and degradation of PHA," <i>J. Biol. Chem.</i> 266(4):2191-08 (1991).	
		JEFFERSON, et al., "GUS fusions: β -glucuronidase as a sensitive and versatile gene fusion marker in higher plants," <i>EMBO J.</i> 6(13):3901-07 (1987).	
		KATO, et al., "Production of a novel copolyester of 3-hydroxybutyric acid with a medium-chain-length 3-hydroxyalkanoic acids by <i>Pseudomonas</i> sp. 61-3 from sugars," <i>Appl. Microbiol. Biotechnol.</i> 45:363-70 (1996).	
		KHOUDI, et al., "An alfalfa rubisco small subunit homologue shares cis-acting elements with the regulatory sequences of the RbcS-3A gene from pea," <i>Gene</i> 197:343-51 (1997).	
		KLINKE, et al., "Production of medium-chain-length poly(3-hydroxyalkanoates) from gluconate by recombinant <i>Escherichia coli</i> ," <i>Appl. Environ. Microbiol.</i> 65:540-548 (1999).	
		KYOZUKA, et al., "Anaerobic induction and tissue-specific expression of maize <i>Adh1</i> promoter in transgenic rice plants and their progeny," <i>Mol. Gen. Genet.</i> 228(1-2):40-48 (1991).	
		LEE, et al., "Biosynthesis of copolyesters consisting of 3-hydroxybutyric acid and medium-chain-length 3-hydroxyalkanoic acids from 1,3-butanediol or from 3-hydroxybutyrate by <i>Pseudomonas</i> sp. A33," <i>Appl. Microbiol. Biotechnol.</i> 42: 901-909 (1995).	
		MADISON & HUISMAN, "Metabolic engineering of Poly(3-Hydroxyalkanoates): From DNA to Plastic," <i>Microbiology and Molecular Biology Reviews</i> 63:21-53 (1999).	
		MALIGA, et al., <i>Methods in Plant Molecular Biology: A Laboratory Course Manual</i> , Cold Spring Laboratory Press: New York, 1995.	
		MARTINEZ, et al., "pACYC184-derived cloning vectors containing the multiple cloning site and lacZ α reporter gene of pUC8/9 and pUC18/19 plasmids," <i>Gene</i> 68:159 (1988).	

Examiner's Signature	<i>SM</i>	Date Considered	1/3/05
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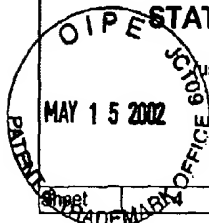


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		Filing Date	November 16, 2001
		First Named Inventor	Stephanie Aquin
		Group Art Unit	1645
		Examiner Name	
Attorney Docket Number	MBX 041		



OTHER ART - NON PATENT LITERATURE DOCUMENTS			
Examiner's Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
EM		MATESANZ, et al., "The cloning and expression of Pfacs1, a Plasmodium falciparum fatty acyl coenzyme A synthase-1 targeted to the host erythrocyte cytoplasm," <i>J. Mol. Biol.</i> 291:59-70 (1999).	
		MCELROY, et al., "Isolation of an efficient actin promoter for use in rice transformation," <i>Plant Cell</i> . 2(2):163-71 (1990).	
		MOLONEY, et al., "High efficiency transformation of <i>Brassica napus</i> using <i>Agrobacterium</i> vectors," <i>Plant Cell Reports</i> 8:238-42 (1989).	
		NAWRATH, et al., "Review of Polyhydroxyalkanoate formation in the model plant <i>Arabidopsis Thaliana</i> ," <i>PNAS</i> 91:12760-12764 (1994).	
		OCHSNER, et al., "Isolation, characterization, and expression in <i>Escherichia coli</i> of the <i>Pseudomonas aeruginosa</i> rhLaB genes encoding a rhamnosyltransferase involved in rhamnolipid biosurfactant synthesis," <i>J. Biol. Chem.</i> 269:19787-19795 (1994).	
		ODELL, et al., "Identification of DNA sequences required for activity of the cauliflower mosaic virus 35S promoter," <i>Nature</i> 313(6005):810-12 (1985).	
		OLSEN, et al., <i>Plant Cell</i> 5:941-952 (1993).	
		OWEN & PEN, eds., <i>Transgenic Plants: A Production System for Industrial and Pharmaceutical Proteins</i> John Wiley & Sons Ltd: England, 1996.	
		PANG, et al., "An improved green fluorescent protein gene as a vital marker in plants," <i>Plant Physiol.</i> 112:893-900 (1996).	
		PLANT, et al., "Regulation of an <i>Arabidopsis</i> oleosin gene promoter in transgenic <i>Brassica napus</i> ," <i>Plant Mol. Biol.</i> 25(2):193-205 (1994).	

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EM		POTRYKUS & SPANGENBERG, <u>Gene Transfer to Plants</u> , Springer-Verlag: Berlin Heidelberg New York, 1995.	
		REHM, et al., "A new metabolic link between fatty acid <i>de Novo</i> synthesis and polyhydroxyalkanoic acid synthesis," <i>J. Biol. Chem.</i> 273:24044-51 (1998).	
		REUSCH, "Low molecular weight complexed [poly(3-hydroxybutyrate): a dynamic and versatile molecule in vivo," <i>J. Microbiol.</i> 41(suppl. 1):50-54 (1995).	
		ROWLEY & HERMAN, "The upstream domain of soybean oleosin genes contains regulatory elements similar to those of legume storage proteins," <i>Biochim. Biophys. Acta.</i> 1345(1):1-4 (1997).	
		SHEEN, "Protein phosphatase activity is required for light-inducible gene expression in maize," <i>J. EMBO</i> 12:3497-505 (1993).	
		SLIGHTOM, et. al., <i>Proc. Natl. Acad. Sci.</i> 80 USA:1897-901 (1983).	
		SÖHLING & GOTTSCHALK, "Molecular analysis of the anaerobic succinate degradation pathway in <i>Clostridium kluyveri</i> ," <i>J. Bacteriol.</i> 178:871-880 (1996).	
		STEINBÜCHEL and VALENTIN, "Diversity of bacterial polyhydroxyalkanoic acids," <i>FEMS Microbiol. Lett.</i> 128:219-28 (1995).	
		TIMM & STEINBÜCHEL, "Cloning and molecular analysis of the poly(3-hydroxyalkanoic acid) gene locus of <i>Pseudomonas aeruginosa</i> PAO1," <i>Eur. J. Biochem.</i> 209(1):15-30 (1992).	
		VAN BEILEN, et al., "DNA sequence determination and functional characterization of the OCT-plasmid-encoded <i>alkJKL</i> genes of <i>Pseudomonas oleovorans</i> ," <i>Mol. Microbiol.</i> 6: 3121-36 (1992).	

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gm		VOGEL & BONNER, "Acetylornithinase of Escherichia Coli: Partial purification and some properties," J. Biol. Chem. 218:97-106 (1956).	
gm		WILLIAMS & PEOPLES, "Biodegradable plastics from plants," CHEMTECH 26:38-44 (1996).	

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